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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,525	09/10/2003	Hitoshi Yoshino	03500.009931.7	5353
5514 7590 10/24/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER SCHWARTZ, PAMELA R	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 10/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/658,525	Applicant(s) YOSHINO ET AL.	
	Examiner Pamela R. Schwartz	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44,45,47,54,55,57,58 and 60-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44,45,54,55,57,58,60 and 61 is/are rejected.
- 7) ☒ Claim(s) 47 and 63 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>same date</u> . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

Art Unit: 1794

1. Claims 44, 45, 54, 55, 57, 58, 60 and 61 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 8-12 of U.S. Patent No. 6,576,324.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims are directed to a printing medium having a base material and an ink receiving layer (cl. 1). The ink receiving layer contains alumina hydrate of boehmite structure which, in accordance with claim 8, has an average pore radius distribution of from 2 to 20 nm and a half breadth of pore radius distribution within a range of 2 and 15 nm, and in accordance with claim 10, has peaks in pore radius distribution at less than 10 nm and with a range of 10 and 20 nm. While these values are for the ink receiving layer, when read in light of the specification, they are clearly values attributable to the alumina hydrate. In addition, the ratio of pigment to binder as recited by claim 12 of the patent is within a range of 5:1 and 20:1 by weight. This range is encompassed within the instantly claimed range. The reference does not recite in its claims that the alumina hydrate powder is dried and dispersed in a medium to form a coating dispersion, that the base material is resin coated paper or thermoplastic film or that the medium is formed by coating the base material with a dispersion. It would have been obvious to one of ordinary skill in the art to purchase the alumina hydrate as particles and to later form a dispersion of the particles since it is easier to store and transport the particles than it is to store and transport the dispersion. It would have been obvious to one of ordinary skill in the art to use a conventional material such a thermoplastic film as the base material and to form the medium by

Art Unit: 1794

applying a dispersion of coating materials to the support by conventional coating means.

2. Claims 44, 45, 54, 55, 57, 58, 60 and 61 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5-7 and 13-15 of U.S. Patent No. 5,707,716. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims are directed to a recording medium having a base material and an ink receiving layer (cl. 1). The ink receiving layer contains alumina hydrate of boehmite structure which, in accordance with claim 13, has an average pore radius distribution of from 2 to 20 nm and a half breadth of pore radius distribution within a range of 2 and 15 nm, and in accordance with claim 15, has peaks in pore radius distribution at less than 10 nm and with a range of 10 and 20 nm. While these values are for the ink receiving layer, when read in light of the specification, they are clearly values attributable to the alumina hydrate. In addition, the ratio of pigment to binder as recited by claim 6 of the patent is within a range of 5:1 and 20:1 by weight. This range is encompassed within the instantly claimed range. The reference does not recite in its claims that the alumina hydrate powder is dried and dispersed in a medium to form a coating dispersion, that the base material is resin coated paper or thermoplastic film or that the medium is formed by coating the base material with a dispersion. It would have been obvious to one of ordinary skill in the art to purchase the alumina hydrate as particles and to later form a dispersion of the particles since it is easier to store and transport the particles than it is to store and transport the dispersion. It would have been obvious to one of

Art Unit: 1794

ordinary skill in the art to use a conventional material such a thermoplastic film as the base material and to from the medium by applying a dispersion of coating materials to the support by conventional coating means.

3. Claims 47 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

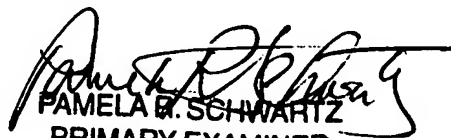
4. Applicant's arguments with respect to claims 44, 45, 54, 55, 57, 58, 60 and 61 have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz
October 19, 2007


PAMELA B. SCHWARTZ
PRIMARY EXAMINER